

## Sandians Pledge \$243,270 to ECP

Sandia Laboratory's Employees Contribution Plan committee compiled the final statistics on the current drive last week and has reported a new high of \$243,270 pledged by Sandians. The current total surpasses last year's record gift by \$22,566.

Of the 6925 employees at Sandia Laboratory during the drive, 6141 contributed. Of these, 5850 are members of the ECP which requires a minimum annual contribution of \$12. Percentage of employees participating in ECP is 84.5.

Fair Share givers, employees who contribute at least one hour's pay per month, number 2116. In addition, 138 employees are giving one percent of their income or more.

Average gift of the employees who contributed was \$39.61, up from \$36.20 last year.

The ECP funds are distributed to the United Fund and eight other health and welfare agencies.

## New Printed Circuits Shop Addition Set For Sandia's Bldg. 841

A new printed circuit shop will be added to Sandia Laboratory's Bldg. 841, the Atomic Energy Commission announced recently. The 4600-square-foot addition will be built onto the northwest corner of Bldg. 841, which now houses the foundry, sheet metal shop, and other Development Shops 4200 facilities.

Outstanding feature of the new printed circuits shop will be a 1500-square-foot laminar flow clean room. The new facility will make possible increased standards of quality and precision, according to N. A. Cordova, 4233-2 supervisor. The work will be essentially the same as that produced in the Bldg. 839 printed circuits shop. Stringent contamination and environmental control will be available beyond the capabilities of the present shop.

Some of the present equipment will be moved to the new facility, and some new equipment will be installed. The current complement of 14 employees will continue to operate the facility.

Construction should start by Dec. 1, according to K. D. Harper (4542), Plant Engineering Department project engineer, and be completed by May 1, 1966.

## To Chair AMA Session

R. S. Cox, supervisor of Cost Division 4152, will be chairman of an orientation seminar during an American Management Association meeting Dec. 6-8 in Los Angeles. This particular session will be concerned with "Tools, Techniques and Skills in Systems Planning and Analysis."

Mr. Cox will also present a paper entitled "Administration of the Systems Function."



SANDIA CORPORATION

PRIME CONTRACTOR TO THE ATOMIC ENERGY COMMISSION

ALBUQUERQUE, NEW MEXICO • LIVERMORE, CALIFORNIA

# LAB NEWS

VOL. 17, NO. 24, NOVEMBER 19, 1965

## New Pulse Reactor Will Be Added To Sandia Corporation's Area V Facilities

A new pulse reactor is scheduled to be added to Sandia's reactor facilities. The reactor, to be contained in a 25-foot deep pool of water, will be in the same building that houses the Sandia Engineering Reactor in Area V.

This will be the second pulse reactor at Sandia. It will provide larger neutron fluxes per pulse and a larger test space at the high neutron flux than the Sandia Pulse Reactor (SPR). It can also be pulsed more frequently than the SPR.

During the few thousandths of a second that the reactor is at its pulsing peak, before automatically shutting itself down, its rate of energy output—in terms of electrical kilowatts—will be 20 times greater than the rated output of Hoover dam.

Authorization for the reactor, designated the Annular Core Pulse Reactor (ACPR), has been issued to Sandia by the Atomic Energy Commission. ACPR will be used to conduct studies on the behavior of electronic systems and circuits during and immediately following intense neutron bombardment.

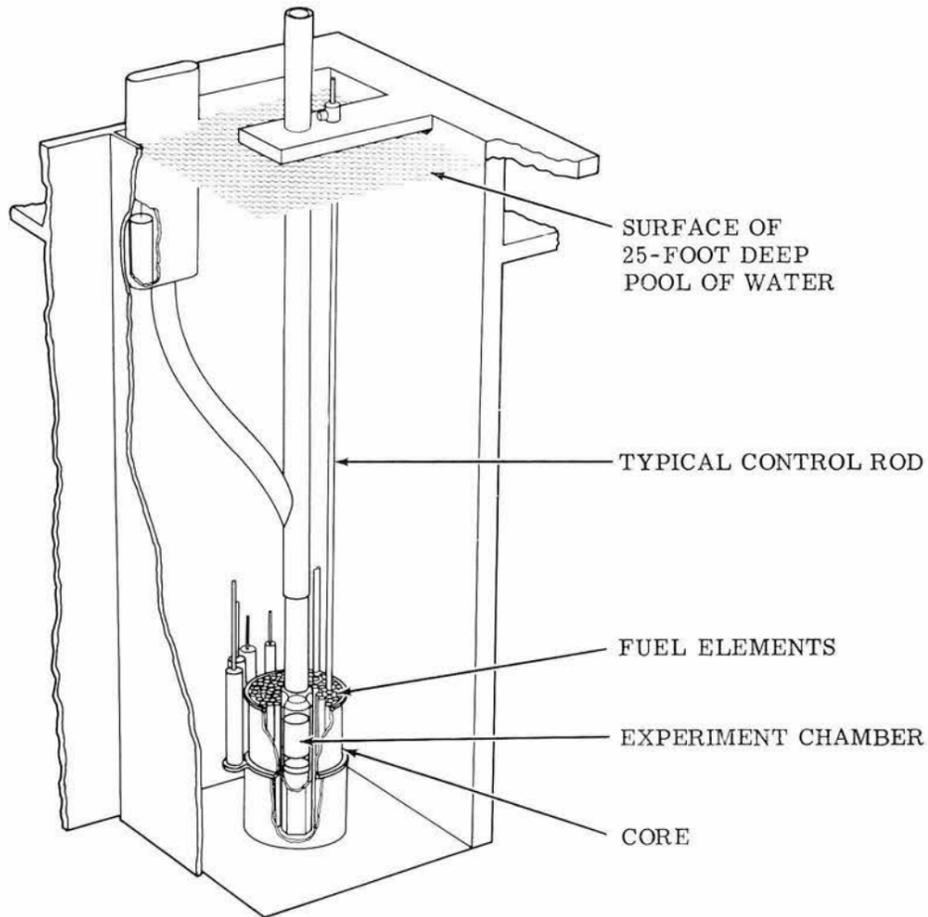
It will be installed in the area now occupied by the SNARE (Sandia Nuclear Assembly for Reactor Experiments) reactor. The SNARE, a zero-power steady state reactor, was used to perform measurements related to the design and operation of the five megawatt, steady state Sandia Engineering Reactor. These needs will soon be satisfied, and SNARE will be dismantled.

ACPR will have a nine-inch diameter, hexagon-shaped tube where experiments will be exposed to fast neutron fluxes. This experiment chamber will be surrounded by 205 stainless-steel clad fuel elements. The fuel will be uranium-zirconium-hydride.

The experiment-chamber area of the tube is about 15 inches long. Reflectors at the top and bottom of this area will insure a uniform neutron flux distribution over the experiment chamber.

F. A. Hasenkamp, project engineer for Reactor Development Division 5223, noted, "The size of the experiment chamber will allow us to test subsystems and entire electronic systems."

"With its present design and fuel, the pulse reactor will produce about five times



UNDERWATER POOL installation of Sandia's new reactor is shown in artist's drawing above. Core elements will be at the bottom of the 25-foot pool. Modifications to Bldg. 6588, which will house the new reactor, will start in early 1966.

$10^{18}$  fission reactions per pulse. Neutrons from these fissions will result in exposures of greater than  $10^{15}$  neutrons per square centimeter in the test chamber during the 4.2 millisecond pulse. This is about a million-billion neutrons for every square centimeter of the sample. With new fuels, significantly larger fluxes of  $10^{16}$  may be attained."

The major limitation in achieving greater neutron fluxes in a pulse reactor is that all of the fission energy released in a burst must be absorbed by the fuel body without destroying its capability to repeat the performance within a few minutes. One of the activities of the Reactor Development Division is that of studying how new reactor fuels technology can be exploited for pulse reactor applications.

As the diagram shows, the reactor's core will be at the bottom of the 25-foot pool which serves to shield and cool the reactor. Following exposure to the radia-

tion pulse, the irradiated systems can be drawn into the chamber near the top of the branch tube (on the left in the drawing) to "cool" before being extracted for examination. Systems can be inserted and removed through either the branch or vertical tube.

The new reactor, the largest and most powerful of the 33 TRIGA reactors now operating or soon to be placed in use around the world, is to be supplied by General Atomic Division of General Dynamics. It will be located in Bldg. 6588, Technical Area V. Sandia personnel will assist in installing the reactor and conducting the start-up testing.

Modifications to Bldg. 6588 will start in early 1966, and operation of the facility is expected about one year later.

R. F. Armstrong (4543) is the Plant Engineering Dept. project engineer for the construction.



FORTHCOMING ASME SYMPOSIUM on "Filament Structures Technology" will represent hours of work by these Sandia committeemen: (l to r) J. T. Foley (1541), registration and reservations; E. R. Frye (1112), Session II chairman; K. D. Nokes (2452), printing; H. E. Morse (1522), facilities; H. F. Maciolek (1531), proceedings; J. C. Taggart (1513), finance; and B. S. Hill (9312), administrative chairman.

## Sixth ASME Symposium Dec. 3-4 Features Filament Technology

"Filament Structure Technology" has been chosen as the theme for the Sixth Annual Symposium of the New Mexico Section, American Society of Mechanical Engineers to be held in Albuquerque Dec. 3 and 4.

E. R. Frye, supervisor of Encapsulation and Reinforced Plastics Division 1112, will be chairman of the session on "Material Characteristics and Methods of Analysis of Filament Reinforced Structures." Subjects of the other sessions will be "Recent Developments in Filament Winding Technology," and "Destructive and Non-destructive Testing of Filament Reinforced Structures."

Speakers will represent private industry as well as Wright-Patterson AFB, U. S. Naval Applied Science Laboratory, and U. S. Naval Ordnance Laboratory.

The sessions will meet in the ballroom of the UNM Student Union Bldg. The

Friday night banquet will be held at Western Skies Motor Hotel and will feature a talk by Robert Bailey of Lockheed's Supersonic Transport Division, Burbank, Calif.

The program will conclude Saturday afternoon with a tour of ACF Industries' filament winding facilities.

Sandians active this year as committee chairmen for the program include: B. S. Hill (9312), administrative chairman; J. C. Taggart (1513), finance; H. E. Morse (1522), facilities; H. F. Maciolek (1531), proceedings; J. T. Foley (1541), registration and reservations; and K. D. Nokes (2452), printing.

Advanced registration will be possible Nov. 29 and 30 through Fred Cericola (7324), Walt Adams (1512), Henry Togami (9312), or K. C. Goettsche (1112).

## Editorial Comment . . .

Sandia's Medical Department is currently conducting a two-week diabetes detection program. A few facts about diabetes and the importance of the detection program are covered in this article.

Diabetes is a condition in which the person's body does not supply enough insulin to properly digest the sugar in the blood.

It used to be a common cause of death. But with the introduction of insulin treatment in the early 1920's, the mortality rate of diabetes is lower and the life expectancy is markedly greater.

Diabetes cannot yet be cured; however, medical management of the disease has advanced to such levels that most diabetics today can lead productive, almost-normal lives. So this deadly disease has been reduced to the status of a controllable one, and recent developments give promise of greater progress ahead.

The cause of diabetes is still unknown. There is general agreement that the disease is not inherited, although the hereditary factor may make one more susceptible to the disease. Also, no significant relationship has been demonstrated between the quantity of sugar intake and the prevalence of the disease.

The role of nervous strain in the causation of the disease is more complex. A current hypothesis suggests that the individual's adaptation to the stresses of life may be of great importance in the onset and course of the disease.

One of the greatest dangers of diabetes lies in the diabetic not being aware that he has the disease. Early detection and treatment of the disease are essential. This is why Sandia conducts an annual diabetes detection program.

Last year 2974 employees participated in the program. Seven positive cases and 37 potential diabetics were discovered.

Untreated diabetes can be fatal. Employees, including those who participated last year, are urged to visit a Medical station and leave a urine specimen for diabetes analysis. Employees whose tests show positive reaction will be notified.



A TOAST to travel is made by members of the Edelweiss am Rio Grande German-American Club. Among the group planning a charter flight to Frankfort next summer are, from left, Fred Sweet (7264), John Rohrer (2565), and Joe Heaston (7261).



Kay Juric (3126-2)

### Take A Memo, Please

Take extra care during next Thursday's holiday. Accidents can happen in the home or on the highway. Take your good safety habits with you always.

### Outstanding Teenagers Will Visit Sandia Nov. 26

Next Friday 30 outstanding students from Albuquerque high schools will visit Sandia Laboratory as part of a city-wide program to acquaint the youngsters with local businesses and industries.

The junior and senior students were selected by high school counselors. The 120 students will meet at the Civic Auditorium for a briefing before separating into smaller groups to visit the eight "host" companies.

Two groups of 15 each will tour Sandia facilities. Community Relations Division 3433 is in charge of arrangements.

## Primary Standards Measurement Audit Conducted Here

The Interservice Measurement Audit Symposium was held at Sandia Laboratory Nov. 16-18 with participation by the prime laboratories of the Army, Navy, Air Force, Atomic Energy Commission, and the National Bureau of Standards.

The first such audit was held in 1960 with the idea of providing participants with a way to evaluate their individual capabilities. It also presented an opportunity for exchange of ideas in the various fields of metrology.

During the week's symposium, an invited paper was presented by L. F. Shampine (5256) on "Pitfalls in Computer Computations." Audit data was given by the following Sandians: J. C. Moody (2411), angle gage blocks; C. L. Mavis (2412), bolometer mounts and coaxial attenuators; D. W. Braudaway (2412), voltage dividers; R. E. McCallum (2412), resistance; and D. A. Edelman (1442), standard cells.

J. M. Cameron, National Bureau of Standards, Washington, discussed "NBS Investigations of Errors in Measurements," and Dave Russell of the NBS facility in Boulder, Colo., spoke on "Measurements Which Cannot be Tightly Coupled to an NBS Reference."

The seminar concluded with a tour of the AEC/ALO's primary standards laboratories at Sandia.

## Events Calendar

- Nov. 19—UNM Homecoming. Starting at sundown, auto tour through campus to see house decorations and luminarias.
- Nov. 20—Football, UNM vs. Iowa State, 1:30 p.m., tel. 277-0111.
- Nov. 20—San Pedro Mountains (area of 16th century gold discovery), N. M. Mountain Club, leader John DeBuck, tel. 265-0471.
- Nov. 27—Football, UNM vs. Brigham Young University, 1:30 p.m., tel. 277-0111.
- Nov. 27—Helicopter Mesa (Rio Puerco area), N. M. Mountain Club, leader Bart Barton, 877-3590.
- Nov. 27-28—Shalako dances at Zuni pueblo, YWCA bus available for non-members, tel. 247-8841.
- Dec. 1 and 2—Christmas Idea Show, Civic Auditorium.
- Thru December—"Three Cultures of New Mexico" (Spanish colonial, Indian, and early territorial rooms), N. M. Historical Society Museum, 316 Romero NW, tel. 243-2359.

## German-Americans Have Old World Fun; Plan Summer Trip to Europe

Several Sandians are members of the "Edelweiss am Rio Grande" German-American Club which exists for no other purpose than to have a good time in the traditions of the old world.

About 300 members of the group gathered recently at the Fraternal Order of Police Hall for an "Oktoberfest." The room reverberated with the oom-pah-pah of a Wiener schnitzel band while the steins clinked in the background. Men wore "lederhosen"—heavy leather short pants—and the women wore the Bavarian "dirndl" costumes. They had a ball, according to John Rohrer (2565). Next blast is scheduled for New Year's Eve.

Current interest of the club, however, is completing arrangements for a charter

flight to Frankfort, Germany, next June or July. A plane will leave Albuquerque, refuel in New York, and deliver the group to Frankfort. Once there, no formal arrangements have been made—everyone is on his own. After 30 days, the plane leaves Frankfort for the same direct route home to Albuquerque. Transportation and insurance for the trip will cost \$325.

Only persons who have been members of the club for six months at the time of the trip will be eligible, John says. Anyone can join the group (you don't have to be a German-American), and the club welcomes new members. Now is the time to join to be eligible for the trip.

Other Sandians who will be making the flight include Fred Sweet (7263), Joe Heaston (7261), and Wilson Maglidt (3460).

## Retiring . . .



Leonard G. Thompson, a Sandia employee for nearly 15 years, will retire Nov. 30. He has been a service clerk in Life and Performance Laboratory Section 4632-2 the majority of this time.

Mr. and Mrs. Thompson intend to move to Yucaipa, Calif., in December to be near their son and his family.

"This is a town of 25,000 population with many apple orchards. There are mountains on three sides and the weather is similar to Albuquerque except the winters are warmer," he said.

Mr. Thompson plans to take things easy for the present, but in the future he hopes to tour the western part of the United States.

Tomas Lucero, a Sandia employee for nearly nine years, will retire the end of November. He has been assigned to Janitor Service Section 4574-2.

During the winter months he plans to take it easy, but in the spring he'll have his garden to tend. Mr. and Mrs. Lucero, their married daughter and grand-children live on a half acre plot of land near Bernalillo.

Next summer, Mr. Lucero and his brother who lives in El Paso hope to visit Mexico City.

PAGE TWO  
LAB NEWS  
NOVEMBER 19, 1965

## SANDIA CORPORATION LAB NEWS



ALBUQUERQUE, NEW MEXICO • LIVERMORE, CALIFORNIA

Editor: Robert C. Colgan  
Sandia Corporation, Albuquerque, New Mexico

Editorial Offices  
Sandia Laboratory  
Albuquerque, New Mexico  
Employee Publications  
Bldg. 800  
Room 112  
Tel: 264-1053

Livermore Laboratory  
Livermore, California  
Public Information  
Bldg. 912

Tel: Hilltop 7-5100, Ext. 2395

Permission to reprint material contained herein for other than governmental use may be obtained from the Editor, Lab News, Sandia Corporation.

# LIVERMORE NEWS

## Livermore Lab Golf Group Elects Board of Directors

Members of the Sandia Employees Golf Club have elected Elmer Smith chairman of the board of directors for the 1965-66 year. Other directors elected to serve with him are: Gene Aas (8161), first vice chairman; Tom Dadian (8115), second vice chairman; Mike Ferrario (8252), treasurer; Jackie Garrett (8121), secretary; and Joe Genoni (8232), assistant secretary.

At least one tournament a month, as well as a weekly twilight league during the summer months, will be scheduled again this year. Prizes will include trophies, golf balls, and gift certificates. The first tournament will be played Nov. 20 at Elkhorn Golf Course in Stockton.

The club is open to Sandia employees and their families and LRL personnel. Dues are \$1 per year. Those interested in playing may sign up with any club officer.

## Evelyn Bachman Spends Vacation In Jamaica

"The Jamaican people are not only polite and friendly, but are very soft spoken and gentle," reports Evelyn Bachman (8233) who recently returned from a three-week vacation to the island of Jamaica. She found the ways of its people and the beauty of the country most impressive.

As guests of a former Livermore resident who is vice-president of both the Kaiser Bauxite Company in Jamaica and the Jamaican railroad, Evelyn and her husband had the opportunity to see many places off the beaten path.

One day, for example, they traveled 40 miles into the mountains to the original site of the bauxite mines. The trip was along a road lined with little towns and unspoiled countryside.

Another day was spent at Discovery Bay where Columbus landed in 1494 and where the first public beach for natives of Jamaica has been developed.

One of the more unusual side trips found them visiting Barbecue Bottom, a Jamaican village many hundreds of feet below sea level. Some of the residents have never made the two-day climb from their valley up to the main road.

"The women have beautiful, graceful figures," Evelyn commented, "and almost perfect posture from balancing water cans on their heads. They wear gay, colorful clothing."

"I enjoyed watching the native dancing," she added, "and learned to dance the 'ska' and the 'limbo'."

Evelyn also found the "great houses" on the banana, coconut, and sugar plantations most interesting, especially the largest, Rose Hall. These houses were built of stone, hand cut and fitted by slaves over 200 years ago. Marks made by the slaves to identify their work can still be seen in the stones.

Before leaving for Jamaica, Evelyn and her husband had toured New Orleans, and en route home stopped in New York City where they visited the World's Fair.

## Livermore Notes . . .

Mechanical technician, Mike Rogers (8162), addressed a special meeting of the Junior Engineering and Technological Society (JETS) at the Livermore High School on Nov. 3. Mike spoke on the educational requirements and career opportunities for technicians.

JETS is a national organization whose purpose is to familiarize high school students with work in engineering and science.

LRL won the third annual Sandia-LRL Golf Tournament, retaining the permanent golf trophy for another year. LRL scored 48.5 points and Sandia 34.5.

The handicap tourney was played at Kiote Hills Golf Club in Newark, Calif., Oct. 23. Fifty-four players competed in the tournament. Each man could score a maximum of three points. Scoring was determined by allowing one point match play for the front nine holes, one point match play for the back nine holes, and one point medal play for the 18 holes.

Beginning and intermediate duplicate bridge lessons are being offered by the Livermore Duplicate Bridge Club of the Lawrence Radiation Laboratory Recreation Association. There is no charge for the lessons which will be given every Monday evening at LRL's west cafeteria, Bldg. 199, starting at 6:30 p.m. Those interested may obtain additional information by contacting Don Groves, LRL ext. 7321.

George Anderson (8140) and his wife will spend an all-expense-paid three-day holiday in Las Vegas. George won the trip as a door prize at a recent Castlewood Country Club dance and style show. The prize includes round-trip air fare, accommodations at a luxury hotel, meals, and entertainment.

### Congratulations

Mr. and Mrs. Jim Carrell (8155), a son, David James, Oct. 10.

Mr. and Mrs. Jim Olsen (8115), a son, Christopher Jonathan, Oct. 31.

Mr. and Mrs. Joe Vanderpoorten (8124), a daughter, Enid Maude, Oct. 2.

### Events Calendar

Nov. 29—Chabot College Lecture Series, "Man and Word in Crisis," speaker Dr. Rollo May, psychoanalyst and Professor of Clinical Pathology at New York University; Gymnasium at the new Chabot College Campus, Hayward, 8 p.m.

Dec. 1—Fifth lecture, LRL Lecture Series, "Computers and What They Do," by Dr. Sidney Fernbach, Head of Computation and Theoretical Physics Divisions; LRL Auditorium, Bldg. 111, 8 p.m.

Dec. 10—Annual employees Christmas Dance, Castlewood Country Club, 9 p.m.

Dec. 24—San Francisco Ballet, "Nutcracker Suite," San Francisco Opera House, 11 a.m. Reserved seat discount tickets available from LRL Personnel Services, Pat Jordan, ext. 7051.

BACK FROM a three-week Jamaican vacation, technical illustrator Evelyn Bachman (8233) sketches in brush and ink some of her impressions of the Jamaican people.



KENNETH A. McKRIMMON (left, front), Cooperative Work-Study Program Coordinator of the College of Engineering, University of California, Berkeley, discusses work assignments and progress with SCLL Co-op Program Coordinator, Walt Dzugan (right), and students currently working at Sandia (from left), Steve Knight (8111), Craig Johnston (8242), Lou Gold (8162), Larry Dorety (8146), Mike Bergen (8162), and Tom Cline (8242). Absent for the photo was Dennis Myers (8125).

## Three New Students at Livermore Lab Under Work-Study Program

College students, Craig Johnston (8242), Thomas Cline (8242), and Steve Knight (8111), are at work on their first job assignments at Livermore Laboratory under the Cooperative Work-Study Program in Engineering at the University of California, Berkeley. The three join four other engineering co-op students presently at Sandia.

The "cooperative plan" of education is a program whereby students alternate three six-month periods of regular employment in industry with equal periods of class attendance.

Craig, of Lafayette, Calif., was a 1960 Bay Area Science Award recipient for his work in the development of cancer research apparatus while attending Acalanes High School. As an undergraduate at the University of California, he is majoring in engineering physics. When interviewed, Craig volunteered, "I like the program—it provides insight into an engineer's job experience. New college graduates with job experience and training in the company's methods are more desirable employees."

Tom, from Orinda, Calif., attended Miramonte High School. He spent the summer of 1964 in Fairbanks, Alaska, under the National Science Foundation in conjunction with the University of Alaska's Department of Zoophysiology. An undergraduate in engineering, Tom feels the Co-op Program will help him in deciding his future career. "I have narrowed my plans down to electrical engineering, biophysics, or bioengineering," he says. Another major reason he likes the program is that the work periods allow him a break from in-

tensive study and give him a chance to apply what he has learned.

Steve is originally from Sparks, Nev. He attended the University of Nevada and Sierra College near Sacramento, Calif., before transferring to the University of California at Berkeley where he is majoring in engineering sciences. A former employee of the Western Electric Company's installation at Sacramento, Steve feels the Co-op Program primarily offers him the opportunity to earn while he learns.

Normally, five years are required for a Bachelor's degree under the program.

According to SCLL Co-op Program Coordinator Walt Dzugan of Personnel Division 8212, 26 different engineering students have participated in the program since its inception at Livermore Laboratory in 1961. An average of six of these students have been at Sandia at one time. The first work period is usually in the Drafting Division. Later assignments are in various technical organizations, depending on the student's academic major and interests.

## Parade of Roses Tour Planned for New Year's

Lawrence Radiation Laboratory Recreation Association travel club is offering a Parade of Roses Tour to Los Angeles over the New Year's holiday weekend. The tour is open to LRL or Sandia employees and members of their immediate families.

The group will leave Oakland Airport Thursday, Dec. 30, and return Monday, Jan. 3, via Western Airlines. Transportation, hotel accommodations at the Hollywood Plaza Hotel, reserved grandstand seats for the Rose Parade, sight-seeing, some meals, and transfers and tips are included in the \$89 tour rate. Additional options are available at extra cost.

Further information may be obtained from Roy Moffitt, LRL, ext. 7421.

### Sympathy

To L. Olivotti (8117) for the death of his mother in Merrill, Wisc., Oct. 25.

To C. P. Rindone (8252) for the death of his mother in Ansonia, Conn., Oct. 20.

To Carol (8253) and Pat Portolese (8144) for the death of Carol's father in Tracy, Calif., Oct. 29.

To Dick Crawley (8222) for the death of his mother in Weleetka, Okla., on Oct. 30.

To Charlie Duffey (8156) for the death of his son in Livermore, Nov. 5.



A DOLL CAKE in shades of orchid and white is exhibited by Esther Rickert (8232) before presenting it to co-worker Irma Olson as a birthday luncheon gift. Esther made the cake to put the icing on a session of a 10-week, cake-decorating course sponsored by the Livermore Recreation Center. Highly decorated cakes of this type require from four to seven different colored tubes of frosting with various tips. Other Sandians attending the classes were Vivian Lenz (8223) and Kitty Kinzer (8253).





WARM NEW MEXICO SUNSHINE permits outdoor eating even in November. The patio addition to the tech area cafeteria (Bldg. 839) is sheltered by a six-foot louvered fence.

## Coronado Bowlers Plan Mixed Couples Tournament Dec. 4

The Coronado Bowling Club will hold its first tournament of the season Saturday, Dec. 4, starting at 4 p.m. at Eu-Can Bowl Lanes.

The mixed couples tournament is open to all Coronado Club members and will be sanctioned by ABC/WIBC. Trophies will be given for high handicap series (men and women), high handicap game (men and women), and high series handicap (couple). In addition, a bowling ball will be presented to the man or woman bowling the highest series handicap of the tournament.

An entry fee of \$6 per couple is due by Nov. 29. The fee includes three lines of bowling per person, trophy money, and refreshments following the tournament.

Additional information and entry blanks may be obtained from George Kambourellis (1425), tournament director; Cynthia Kelly (3113), tournament secretary; or O. B. Tjeltweed (1514).

## Coronado Fashion Show and Dinner-Dance Saturday

Turkey to put you in the mood for Thanksgiving, gift-giving ideas to put you in the mood for Christmas. That's the offering at the Coronado Club tomorrow evening.

The dinner, served from 6-8 p.m., will feature roast tom turkey with all the trimmings. The fashion show from 8-9 p.m. will include evening dresses, hostess outfits, and many suggestions for holiday wearing or gifts. The Lamplighters will provide music for dancing 'til 1 a.m.

Tickets are \$3 for members, \$3.50 for guests.

## Welcome Newcomers

Oct. 18 - Nov. 12

Albuquerque	
John H. Adams	3415
Jennifer J. Bell	3126
Eileen V. Bennick	3126
William E. Blythe	7325
Carol O. Bryan	2554
Joyce V. Costello	4341
Roy J. Hart	4574
Elizabeth S. Harvey	3126
Mary C. Helton	3126
Virginia A. Herrera	4342
Mary I. Iverson	2554
Ralph T. Johnson, Jr.	5132
Charlene P. Lanford	5253
Lou Ellen Lobley	3126
Herman R. Lucero	3415
Gabriel E. Maestas	4574
E. Collene Nials	4135
Arluce A. Pearlman	4333
Maynard L. Sullivan	4574
Annabelle M. Swain	3421
Patricia E. Tate	3126
Dorothy O. Taylor	3153
Garry C. Tolbert	3415
Beatrice M. Whittaker	4152
Colorado	
Newton C. Fawcett, Colorado Springs	1111
Illinois	
William C. Lyons, Evanston	1116
Minnesota	
Thomas B. Linnerooth, Stillwater	1432
New Jersey	
Donald J. Schubeck, South Plainfield	4113
North Carolina	
Sam G. Beard, Jr., Hendersonville	9321
Washington	
Alan G. Beattie, Seattle	5151

## Smoldering Cigarettes Cause Two Blazes; Total Damage \$20

Carelessness in putting out cigarettes was apparently the cause of two minor fires in one week at Sandia Laboratory.

On Nov. 1, a security inspector making his evening rounds of Bldg. 866 found a fiberboard trash barrel on fire. The trash barrel had burned down to within six inches of its base and the flames had scorched the paint on both sides of a nearby metal truck which contained plywood. The inspector extinguished the fire. The damage was estimated at \$20.

Three days later, two janitors found several newspapers burning in a restroom in Bldg. 894 at about 6 p.m. Since the fire had apparently just started and the men extinguished it promptly, there was no property damage. A cigarette butt was found with the crumpled newspapers.

## Sympathy

To R. E. Wason (7226) for the death of his mother Oct. 5 in Lompoc, Calif.

To R. P. Gall (3431) for the death of his mother-in-law Nov. 2 in Long Beach, Calif.

To Dorothy Bair (4133) for the death of her mother Oct. 11 in Albuquerque.

## Librarian to Direct Modern Greek Drama At Old Town Studio

The ancient Greek drama "Antigone" in modern dress has been chosen by John Gardner (3421) as the first play he will direct for the Old Town Studio.

The play will be presented for three weeks starting Nov. 26 on Friday, Saturday, and Sunday evenings. This version was written by Jean Anouilh during the German occupation of France and concerns the fight of the individual against the dictator.

John, a reference librarian, has appeared in two shows at the Albuquerque Little Theatre and in three plays at the Corrales Adobe Theatre. He also was active in drama groups in New Jersey and in his native England.

The producer of the show is another Sandian, Crawford MacCallum (5231).

## Supervisory Appointments



JOHN T. WILLIAMS to supervisor of Military Manuals Division 7523, Technical Manuals Department, effective Nov. 1.

John has been a technical writer of military manuals since he came to Sandia in Feb. 1959.

Previously he was attending the University of Texas where he received a BA degree in mathematics.

John served in the Air Force from 1949-55 as a technical illustrator.

He is past chairman of the Albuquerque chapter of the Society of Technical Writers and Publishers.

## Death . . .



George E. Banker, a Sandia employee for more than nine years, died Nov. 10 following a short illness. He was 54.

He was a technical staff assistant in Energy Components Division 2134.

Survivors include his widow, his father, step-mother, and a brother in Wilmingon, Ill., a brother in Farmington, Conn., and a sister in Clinton, Iowa.



MRS. VIRGINIA GLASS to supervisor of Typing Services Section 3126-5, Secretarial Services Division, effective Nov. 1.

Virginia has been with Sandia since March 1954 except for a year when she moved with her

husband to Dallas. Originally hired as secretary to a buyer in the Purchasing organization, she was promoted to department secretary, and later secretary to the Director of Quality Assurance. When Virginia returned to Sandia four years ago, she was secretary to the Secretarial Services Division and later was promoted to Staff Assistant as an operations analyst.

Her previous secretarial employment was with the Disabled American Veterans organization in Albuquerque, and Bendix Radio in Towson, Md.

She attended Easton and Burnett Business School and Mount St. Agnes College, both in Baltimore.

## Sandia Authors

A. J. Chabai (5623), "Scaling Dimensions of Craters Produced by Buried Explosions," Oct. 15 issue, JOURNAL OF GEOPHYSICAL RESEARCH.

A. E. Jones (3415), "Sharing Communications Networks," December issue, SPECIAL LIBRARIES.

## Nine Teams Shoot in Dept. 2210 Match

Four sharpshooters from Section 2213-5 took top honors in the recent Design Definition Department 2210 rifle match.

The winning team members and their individual scores (out of a possible 100 points) were Team Captain Tim Ristine, 71; George Staller, 88; Mack D. Weaver, 93; and Hank Cranston, 95. The 2210 traveling trophy was presented to the team, awards were given each member of the team, and another award for individual high score went to Hank Cranston.

Nine teams participated in the competition which included firing from four different positions — sitting, standing, prone, and kneeling. The match was held at the Sandia Base rifle range and the Sandia Gun Club helped arrange the event.

## Sandia Speakers

J. A. Corll (5132), "Pressure Terminology," ASME High Pressure Technology Symposium, Nov. 8, Chicago.

K. E. Sutton (3222), "Engineering Opportunities with Sandia Corporation," Society of Engineering Science, University of Texas, Nov. 4, Austin, Tex.

Albert Narath (5150), "Exchange Interactions in Magnetic Insulators," University of Colorado Physics Department Colloquium, Oct. 27, Boulder, Colo.

R. H. Dungan (1132), "Mechanical Properties of Some PbZrO<sub>3</sub>-PbTiO<sub>3</sub> Ferroelectrics," Fall meeting of the American Ceramic Society, Oct. 27-29, Los Angeles, Calif.



FINAL PLANS for tomorrow's dinner-dance at the Coronado Club are being made by (left) Mrs. M. M. Newsom, who is in charge of decorations, and Mrs. J. B. Ayers, who is coordinator for the fashion show which will follow the holiday-theme dinner.



SANDIA BRIEFING for community officials was given Nov. 10 at the Sphere of Science by Vice President R. A. Bice, a former City Commissioner. Members of Sandia's Small Staff were present and joined in the discussions. Examining a piece of scientific glass are (l to r) Sherburne P. Anderson, vice president of AIDS; County Commissioner Gerald Goodman; City Manager Edmund L. Engel; City Commissioner L. J. Heilman, Director of Quality Assurance 2100; and Mr. Bice. The guests also saw the film "Environmental Testing."

# Service Awards

15 Years



C. W. Appel  
2551



Donald Barack  
4253



B. L. Bookwalter  
2533



J. B. Braffett  
1413



Gertrude Butler  
7223



Margaret Conney  
7331



Helen Culley  
3321



W. E. Davis  
2211



R. B. DeWitt  
2125



T. R. Gourd  
9413



H. M. Hadlock  
3242



Rose Hainlen  
4152



M. M. Herrera  
4254



C. L. Hines  
3244



J. R. Hollon  
4513



E. M. Inglat  
9225



E. M. Irving  
2533



J. G. King  
2564



D. A. Mayfield  
7233



S. O. Miller  
4513



C. R. Mock  
2441



E. T. Robbins  
3242



H. D. Roeder  
4224



P. N. Saavedra  
4513



F. R. Snyder  
4373



D. J. Stout  
7231

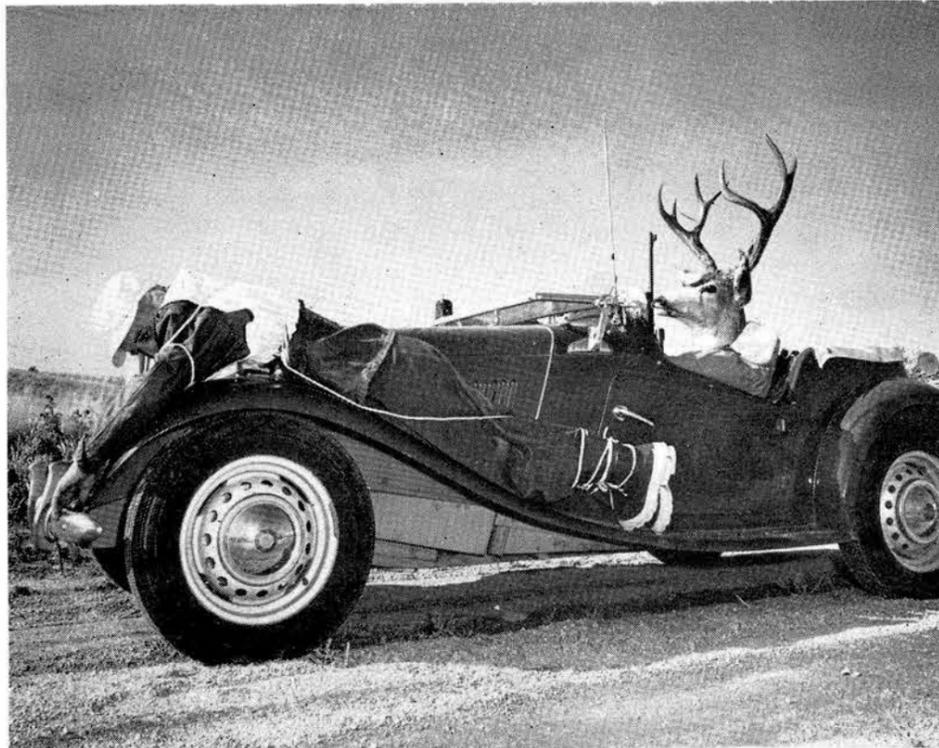


T. R. Thompson  
2554

## 10 Years

Nov. 19 - Dec. 2

L. F. Estabrook 1331, W. W. Kuhn 2562, Margaret A. Sanders 2231, Ruth M. Chapman 3428, L. F. Foster 2212, Eustaquio Rael 4254, and P. H. Arnold 9424.



FEARLESS FRANK FEERY (2132), who has bagged his legal limit for years, was done in by the son of Bambi. With one more weekend of deer season remaining, hunters are reminded to be careful. Ordinary hunting accidents are lethal enough.

## Take Note . . .

Sandia Comptroller R. G. Luckey (4100) has been chosen to serve three additional years on the Committee of Accounting Faculty Associates which works with the University of Texas in continuing development of accounting education.

The committee is composed of accountants in industry, public practice, and government and helps promote understanding and cooperation between the university and the business community.

The committee met with the faculty of the Department of Accounting in Austin Nov. 5 and 6.

W. C. Kraft (2440) and W. A. Sherman (2113) spoke in Amarillo, Tex., Nov. 4 to a group interested in forming a sub-section of the Albuquerque Section of the American Society for Quality Control.

Mr. Kraft is chairman and Mr. Sherman is treasurer of the local section.

A steering committee was appointed to handle administrative affairs until regular officers are elected.

Present were about 35 persons from

AEC, Mason & Hanger, and Sandia Corporation at Amarillo.

George MacClain, Director of Classification Management, Department of Defense, Washington, D.C., visited Sandia Laboratory on Nov. 2 and 3. J. G. Marsh supervisor of Classification Division 3414, coordinated discussions and briefings by members of Sandia management and a tour of areas of interest in Tech Area I.

Elio Cultreri of Safety Engineering Division 3211 addressed a meeting of the Kiwanis Club of the Rio Grande recently. His subject was "Defensive Driving." At Sandia, Elio's responsibility includes traffic safety.

The Albuquerque chapter of the National Defense Transportation Association has received recognition for achieving the greatest percentage of increase in chapter membership in the Southwest region. Jack R. Spence, supervisor of Sandia's Traffic Division 4363, was president of the chapter during this particular period.

## SHOPPING CENTER

**CLASSIFIED ADVERTISING**  
Deadline: Friday noon prior to week of publication unless changed by holiday.  
A maximum of 125 ads will be accepted for each issue.

**RULES**

1. Limit: 20 words
2. One ad per issue per person
3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Corporation and AEC employees only
6. No commercial ads, please
7. Include name and organization
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

### FOR SALE

18 HP EVINRUDE outboard motor. Fjelseth, 299-4539.

2 BLOCKS from Base, brick, 3-bdr., 1 1/2 baths, hw/floors, AC, landscaped, \$15,900; FHA value \$16,500. Schatz, 299-4585.

MATCHED GE washer and dryer, \$100 for pair. Harrison, 299-7928.

TIRES: 1 7:50x14 Allstate 4-ply w/w, \$15; 2 8:50x14 Goodyear 4-ply, \$8; 7-drawer walnut desk w/glass top, \$30. Schafer, 3637 Georgia NE, 299-4634 after 5.

'59 STUDEBAKER Lark VI, AT, R&H, \$200. DeWitt, 299-4925.

ROSE-BEIGE overstuffed davenport and chair, foam cushions. Cocks, 255-4105.

BICYCLE, girl's 20", chrome plated guards, \$15. Schroll, 299-9142.

REMINGTON model 700 .30-06 rifle w/4X scope, redfield mount, sling and swivels, recoil pad, 50 rounds ammo, \$125. Martin, 296-1183.

3-BDR. HOME, landscaped, many large trees, bluegrass lawns front and back, 1605 Maxine NE. Cope, 298-5864.

3-BDR., 1 1/2 bath, den w/fp, dbl. garage, 1700 sq. ft., equity \$2800, take over payments, balance under \$17,500. Watkins, 516 Hillview Ct. NE, 298-3667.

'30-06 SPRINGFIELD sportized rifle, 4-power scope and sling, hand made stock, \$125. Miller, 298-1514 after 5.

'64 TRAVEL MASTER camp trailer, 13', fully insulated, will sleep 6, chemical toilet, \$750. Gilbert, 299-9141.

'65 YAMAHA motorcycle, 8HP, purchased new Mar. '65 for \$380, 8000 miles, 4-spzd, \$290. Wagner, 299-5100.

SOUTH VALLEY HOME on 2/3 acres, 3-bdr., 1 1/2 baths, 21x23 LR w/fp, hw/floors, AC, furnished w/attached newly redecorated apt. 427-3045.

SCOOTER, 3-wheel Lambretta, enclosed cab and carrying trunk, \$250. Bailey, 298-4678.

GO-KART, v-belt drive, 2 1/4HP engine, \$30 or best offer. Church, 2957 Wisconsin St. NE, 299-7038.

12-VOLT Battery (Sear's #38), 9 mos. old, \$7; tire, 7.50x14 tubeless (Ward's #6424), \$7. Ristine, 256-2708.

GE RANGE, \$75; GE refrigerator, \$50. Benderman, 299-6989 evenings or weekends.

HARVEST QUEEN deep freeze, 16 cu. ft. upright, \$150. Weber, 299-0494.

BLOND glass-topped tables: 2 end, coffee, and occasional, \$35; RCA 21" TV, good tubes, needs power supply, \$25. Schneider, 2817 Espanola NE, 299-3769.

'62 PORSCHE 1600S, 36,000 miles. MacCallum, 898-2003.

TEN WIDE house trailer w/appliances, \$1900, will take 4-wd vehicle as partial payment. Patterson, 877-3158.

THREE RUGS: 2 9x12 rayon, 1 6x12 wool, needs cleaning, \$5/ea. Miller, 268-5992.

FAIRCHILD professional turntable, arm and cartridge, \$48; arm and cartridge, \$15; pair Jansen enclosures, 4-sprk. system, \$29; '61 MG HT "1600." Browning, 299-6384.

TRAIN SET, American Flyer, \$20; typewriter, full size, \$10; jig saw, \$20. Denney, 268-0004.

REGISTERED English Springer pups, \$50 ea., 8 wks. old Christmas day. Haskell, 865-7900.

HEATHKIT CB radio, 23 channel receive, transmit XTALS for chnl. 11 and 13, \$25. Frye, 268-9724.

'57 DODGE PICKUP, 3/4 ton, Series 200, 17 1/2" wheels, R&H, custom trailer hitch, \$500. Huston, 299-2056.

AKC REGISTERED German Shepherds, proven champion background, 3 males and 1 female. Riley, 256-9722 after 5:30.

.22 cal. S&W target pistol model 41, \$75; gas range, \$15. Langenhorst, 298-3595.

RESIDENTIAL LOT, 75x120', 3600 block Horacio NE; 3-bdr. AC, carpeted, drapes, gas range, pitched roof, patio, near bases-shopping. Dyer, 1412 Glorieta NE, 299-5324.

DBL. roll-away bed, \$25; baby buggy, converts to car-bed, \$8; youth's accordion, \$75; 2 rocking horses, \$3 \$5; Kcmore hem stitcher, \$5. Browne, 344-9675.

UPRIGHT PIANO, Cable-Nelson w/bench, medium size, rebuilt 1 yr. ago by Cleavelands, will deliver, \$185. Wilken, 299-7515.

ITALIAN ACCORDION, 120 base, 2 treble shifts, 41 keys w/case and music stand, \$120. Stevenson, 298-3677.

SNOW TIRES, Firestone Town and Country, 7:10x15, used two seasons, 2 for \$15. Womelstuff, 299-6269.

PIANO, Wurlitzer, mahogany, full size spinet, \$450. Jones, 298-4891.

MOTOROLA TV: table radio; portable typewriter. Morrissey, 247-1130.

AKC REGISTERED Miniature black Poodle, 6 mos. old, housebroken, \$35. Neun, 299-9188.

'50 CHEV. PU, 1/2-ton, 4-speed trans.; canvas covered camper. Erbert, 299-1164.

'62 1/2-TON CHEVROLET pickup, \$950 w/camper, \$1000 w/camper. Silva, 256-9320 after 5.

SELL OR TRADE: 2 old wood heaters; wood cook stove; small gas or butane refrig.; pair girl's roller skates. Pritchard, 268-9618.

MOUTON FUR COAT; HO gauge train set layout. Martin, 298-2064.

SCOTT 72-watt dual channel amplifier, unused except for checkout following assembly, \$125 or best offer; clothes line poles, \$8. Jones, 268-5236.

'50 CHEV. 4-dr., new tires, directionals, all running parts new, \$125. Guist, 299-9060.

BICYCLE, girl's 20", thornproof tubes, \$15. Kohut, 298-0695.

'64 CHRYSLER 300, 4-dr. HT, 4-speed manual transmission, AC, PS, PB. Clark, 298-2340.

0-1" Brown & Sharpe micrometer, new. Haines, 299-8683.

'54 FORD pickup, 4-speed, plywood slash canvas cover, 2 new 6-ply tires, \$250. Curzi, 299-6896.

FREE PUPPIES, mother Collie, father unknown. Eiffert, 898-0324.

FREE, bearded iris rhizomes; reversible pleated Pendleton skirt, size 10, \$10; women's ice skates, size 9, \$5. Honnold, 268-5628.

'59 CHEV. PICKUP, 4-speed, new front end, new mud and snow tires, \$675. White, 268-9447.

42" ELECTRIC STOVE, \$30; 20" window fan, \$5. Armstrong, 255-8862.

BRICK 3-bdr., 1 1/2 baths, hw floors, carpeting, drapes, sprinklers all around, landscaped, pay to 4 1/2% loan or refinance. Breehl, 256-1350.

3-BDR. ROBERSON, den, lg. LR, hw/floors, pitched roof, AC, stove/oven, 4 1/2% VA, landscaped, FHA appraised. Coonce, 296-1089.

CARLISLE PLAZA, near schools, 3-bdr., 1 1/2 baths, laundry rm., family rm., 1/2 garage, Cold War Veteran \$200, trade-in considered, \$14,500. Stiefel, 3702 Jeanne Ct. NE, 344-7931.

RUG, reversible 12x15, w/pad; crib mattress; GMC manual; size 3 suit; size 1 coat and dresses; roof feeder w/cartridges. Fisher, 299-9235.

'61 FORD TUDOR, 6-cyl., stick shift, R&H, metallic blue, 6 wheels, 2 snow tires, \$100 off book price. Lenz, 298-3872.

BOY'S Huffy bicycle, high bars and long seat; Tate Goat; bamboo drop curtains, assorted sizes. Calvery, 255-9545.

'61 RAMBLER American station wagon, \$475; 17" portable TV, \$50. Hunter, 299-1089.

REFRIGERATOR, double-door, \$45; 24" electric stove, \$55; both \$90; china, Rose-Chinz pattern, ten place settings and serving pieces, \$25. Calek, 282-3285.

TEAL BLUE velvet sheath dress w/lined jacket, size 12, \$15; walnut table model radio, Philco, \$10. Porter, 298-3623.

'63 CHEVROLET 1/2-ton pickup w/sportliner camper, 4-speed trans., 6-cyl. engine, \$1495. Lackey, 282-3991.

'60 GMC pickup (6), 3/4-ton, Positraction, 4-speed trans., cattle rack, custom made rubber mat, \$995 or best offer. Tucker, 282-3204.

BLOND DINING SET w/four chairs, never used, \$50. Stirbis, 299-5363.

'58 EDSEL 4-dr. HT, ST w/OD, 340HP engine, low mileage. Lewis, 298-7333 after 6.

HO TRAINS—3 engines, 5 cars, trestle, track switches, telephone poles, plenty of track, \$75 value for \$30. Freedman, 298-2177.

'61 ALFA ROMERO, model 2000 spider, NADA \$1375, sell for \$1160. Borbely, 299-3210 after 5:30.

NEW ZEBCO casting rod and reel, extra spool, carrying case, \$15; used 3-shelf pine bookcase, \$6. Mitcham, 299-8425.

'57 PONTIAC 4-dr. HT, all power and factory air, \$395, will trade on late model VW. Lotz, 299-2804.

FULLY EQUIPPED 6" bench lathe and bench, \$185. Cranston, 282-3711.

SELL OR TRADE—large lot in Glenwood Hills, Lot 95. Cronk, 299-6401 after 5.

STEREO TAPE recording amplifier, Sony SRA-3, dual VU meters, outputs for high or low impedance recording heads. Bircher, 268-0726.

2 EA. 7:00x14 Continental tires, more than 7/32" tread left, \$10 ea. or best offer. Holt, 299-5943.

FREEZER, National upright, 23 cu. ft., \$150. Riley, 299-3163.

027 LIONEL TRAIN, engine, coal car, rocket launcher, gondola and caboose, transformer and track, \$13. Risk, 298-4617.

ONE 5:90x15, two 6:70x15 tires for trailer or recapping, \$1.50 ea.; one 8:00x14 retread, \$6; two 750 watt electric wall heaters slightly damaged, \$5 ea. Scranton, 299-4902.

'63 TRIUMPH TR4, convertible, electric OD, consider trades, \$1595; '65 Yamaha 55cc, \$150 or best offer. Magnuson, 255-3921.

TWO MALE KITTENS to give away, free delivery, 1 black, 1 tiger. Tatum, 877-0997.

KENMORE electric sewing machine, cabinet style, \$40; Admiral table model TV, \$25. Glaze, 299-4340.

MALE TIGER KITTEN, housebroken. Reilly, 344-8215.

AMATEUR radio transmitter, 60 watt cw and am phone on 80 thru 6 meter ham bands operated less than 9 mos., \$38; 2 band shortwave receiver, speaker, phone terminal \$12. Adams, 256-7265.

'59 JEEP station wagon, 4-wd, one owner, \$895. Watterberg, 299-8517.

3 BDR., 1 1/2 bath, family rm., wood burning fireplace, DR, playroom, dbl. garage, carpet, built-in range/oven, dishwasher, 1/2 acre, landscaped, Bosque Farms. Gay, 112-636-2781.

### WANTED

2 or 3-BDR. den and home to rent, unfurnished, year lease, SE or NE Heights, occupancy starting Jan. 1966. Write James P. Young, 249 E. New St., Lancaster, Pa.

ESTABLISHED carpool needs riders, Candelaria-Rio Grande area. Frauenglass, 345-0119 or Braag, 344-8990.

RIDE from 221 Lagunya NE, 1/2 blocks off Central, to Bldg. 880 parking lot. Burch, 256-6093.

TWO pre-school children to care for during the day, lunch included, \$1.50 per day ea., can give references. Workman, 298-3604.

PERSONS interested in an evening class in conversational Spanish. Mares, 299-2497 evenings.

RIDE from vicinity of Menaul and Louisiana to Bldg. 800. Calkins, 256-0041.

RIDE from vicinity 308 Wilshire Dr. SW to 894 or 880 parking lot. Vigil, 242-4069 after 6.

CHRISTMAS TRAVELERS, 1-3 passengers, either direction or round-trip Albuquerque, vicinity Lexington, Ky., in Bonanza. Roberts, 282-3664.

SLIDE PROJECTOR for 35mm, reasonably priced and in good operating condition. Adams, 256-7265.

### FOR RENT

UNFURNISHED 3-bdr. apt., 1 1/2 baths, carpets, drapes, range, refrigerator, garage, yard, NE Heights, \$135. Stone, 298-4620.

1-BDR. furnished apt., large clothes closet, lots of cabinets, no pets. 304 1/2 Wyoming NE. Lawrence.

4-BDR., near Winrock, carpeted, electric range, garbage disposal, lawns, walls, fruit trees, \$130/mo., water and garbage paid, 1 yr. lease, available Dec. 1. Mills, 299-2130.

### LOST AND FOUND

LOST—ID and credit cards in black plastic case, cameo earring, ladies tan cardigan sweater, sterling "slide-rule" tie clasp, 7 boxes color slides in manila envelope, man's tinted bi-focal glasses. LOST AND FOUND, Bldg. 610, tel. 264-2757.

FOUND—Bound record book/Math 471. LOST AND FOUND, Bldg. 610, tel. 264-2757.



LIVING QUARTERS on Amchitka consisted of joined-trailers. A. J. Max (7233), one of the seven Sandians on the island for Project Long Shot, noted that the quarters were fine and the food was excellent. Photos were taken by Maurice Gilmer (7242).

### 80-Kiloton Nuclear Device

## Sandians Report Slight Jolt Marks Underground 'Long Shot' Detonation

"At the control point there was a slight jolt and about an inch of movement when the 80-kiloton nuclear device exploded," Byron F. Murphey commented. "The control point is about four miles from ground zero on Amchitka Island, and the explosion was 2300 feet underground."

Mr. Murphey, manager of Nuclear Burst Physics Department 5230, was the scientific advisor to the Test Managers of the DOD's Project Long Shot.

Detonation of the Long Shot device was at 11 a.m. (Anchorage time) on Oct. 29. One of the prime purposes of the experiment was to measure more precisely the travel times and identification characteristics of seismic signals from the Aleutian area. These measurements required the generation of seismic signals from a controlled explosion in the Aleutians, and the observation of signal arrival times at seismological observatories. This data will contribute to differentiating between seismic signals caused by earthquakes and those caused by underground nuclear explosions.

"The building atop the well head (ground zero) was intact after the blast," Mr. Murphey continued, "and there was no increase in the background-radiation readings following the detonation."

A Department of Defense spokesman termed the shot "a perfect success," and these words were echoed by the seven Sandians on Amchitka for the project.

A. J. Max, supervisor of Range Staff/Rockets and Ordnance Division 7233, was technical director for the AEC Projects Group responsible for coordinating device emplacement, instrumentation, stemming activities (filling and tamping the 2300-foot drill hole), timing, firing, accountability, and area safety at shot time.

Mr. Max noted that all of the Sandia instrumentation yielded the desired data, and that the detonation was perfectly contained—this containment was a LASL-Sandia responsibility. He added that Sandia's seismic stations at Sandia Laboratory in Albuquerque, Tonopah Test Range, Darwin, Calif., and St. George, Utah, all recorded the explosion.

#### Amchitka

The island of Amchitka is some 40 miles long and five miles wide. It is about 1400 miles southwest of Anchorage, Alaska.

"The weather on Amchitka was far less severe than we expected," Mr. Max said, "Temperatures were in the forties and dropped below freezing only a couple of nights during the three weeks we were on the island."

"There were about three days that were uncomfortable—80 mph winds, combined with dampness and a 40° temperature can be pretty nasty. Actually it doesn't get extremely cold at Amchitka, but I understand that very high winds prevail during the winter months, and summer brings continuous fog and rain."

"The island is covered with grass, small lakes, and scattered dwellings. The dwellings were used by the 50 or 60,000 men stationed there during parts of World War II."

"Our living quarters were quite comfortable and the food was excellent," Mr. Max concluded.

The other five Sandians on Amchitka for Project Long Shot were:

G. W. Randle (Full Scale Mechanical Design Division 7264), who was Mr. Max's assistant, and was responsible for the Long Shot instrumentation installation; H. M. Miller (Blast and Earth Motion Division 7242), who was project officer for the Sandia Hydrome instrumentation; M. E. Gilmer (7242), who assisted in this program;



PREPARING INSTRUMENTS in the Sandia trailer on Amchitka for the Project Long Shot experiment are Maurice E. Gilmer, left, and Harvey Miller (both of 7242).

J. A. Shindelar (A&F Field Support Division 7262), who was project officer for the Sandia geophone instrumentation which monitors cavity collapse. (This project was part of the AEC safety program.)

And W. D. Burnett (Health Physics Division 3312), who was safety advisor to the Joint Operations Group.



AMCHITKA ISLAND LANDSCAPE is covered with yellowed grass, dozens of small lakes, and the shells of buildings and quonset huts occupied by U.S. troops during World War II.

## Ballads, Go-Go, Novelty—Name The Song and Ann Faught Writes It

Ann Faught (4622) is humming a new kind of tune these days—her own. After "fiddling around" with writing songs as a hobby for about five years, Ann has boarded the bandwagon for the big time.

Three of her original songs have been recorded and distributed to 1200 radio stations in metropolitan areas, including Mexico City. The records are distributed under her own label, Space Records, and published by her own Astronette Publishing Company. She is a member of Broadcast Music Inc.

"Why not?" Ann says. "The music business is exciting and it's great fun. If you're going to do a thing, might as well do it right."

Ann pins her hopes on a plaintive ballad called "What Chance Have I." This tune, recorded by a local group of musicians, has been well received. The Spanish version, on the flip side of the record, just might be a sleeper. Reports from Mexico City are very good.

The other record features a rock and roll group in a go-go arrangement of Ann's jump tunes, "My Baby Done Left Me," and "I'll Get Along Somehow."

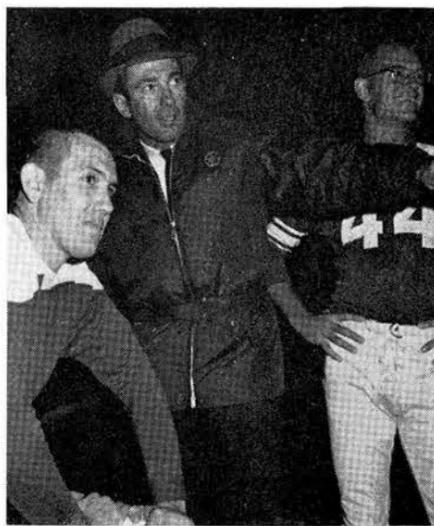
"These," Ann says, "do not quite make sense but they move. I'd say they are typical rock and roll. Ballads should tell a story and have a nice melody. These you work on. Rock and roll is different. You know what I mean."



ANN FAUGHT (4622) displays recordings of songs she has written. The records have received a national distribution to radio stations and are featured on local juke boxes.

Ann also writes religious songs, novelty tunes, and patriotic songs. She usually starts with an idea, decides on a title, and then works out the melody one note at a time on a piano.

"This is the part I enjoy," Ann says. "Creating the song is the satisfying part."



COACH DON LUNDERGAN (1115) discusses game strategy with Sandia Lab All-Star team captains Carl Cron (1122), left, and Ron Martel (2223) during the recent Inter-Base championship flag football game.

## Sandia Lab Football All-Stars Lose in Bid for Championship

The Sandia Laboratory All-Stars lost the final game in a double elimination series for the 1965 Inter-Base Flag Football Championship.

The All-Stars, who were Inter-Base Champs in 1962, '63, and '64, were defeated by the Sandia Base Element team on Nov. 8, by a score of 28-20.

The All-Stars were coached by Don Lundergan (1115), assisted by Bernie Kenna (1121). Team members were Joe Abbott (2423), Dale Brautigam (4517), Carl Cron (1122), Bob Dosch (1121), Larry Ferree (3151), Preston Herrington (9226), Bob Henderson (7311), Cliff Kinabrew (7244), Phil Lopez (AEC), Ron Martell (2223).

John Otts (7324), Norris Rose (3122), Charlie Salazar (4253), Buddy Sanchez (9411), Bill Saric (9326), Bob Stearley (5632), Pete Thoma (1113), Jerry Williams (9411), and Joe Woodley (4632).

## Sandia's Safety Scoreboard

### Sandia Laboratory:

144 DAYS  
5,040,000 MAN HOURS  
WITHOUT A  
DISABLING INJURY

### Livermore Laboratory:

155 DAYS  
779,300 MAN HOURS  
WITHOUT A  
DISABLING INJURY